

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period: \_\_\_\_\_

**Compound Probability Quiz**

Determine if each situation is independent or dependent. Explain your reasoning in one sentence. (4 points)

*Remember: independent events have no impact (weather of two days) and dependent events impact each other (bag with apples and golf ball from BrainPop video)*

**Picking a boy, and then a girl from class**

Dependent - the total number of students changed because you picked a boy

**Flipping a quarter and then a dime**

Independent - flipping the quarter doesn't impact the dime

Find each compound probability. (4 points)

**Situation:** You have 8 marbles in a bag. Four are red, two are blue, one is yellow, and one is green.

*Remember: find the probability of each event, then multiply the fractions*

P(two blues)

$$\frac{2}{8} \cdot \frac{1}{7} = \frac{2 \div 2}{56 \div 2} = \boxed{\frac{1}{28}}$$

P(blue then green)

$$\frac{2}{8} \cdot \frac{1}{7} = \frac{2 \div 2}{56 \div 2} = \boxed{\frac{1}{28}}$$

P(two greens)

$$\frac{1}{8} \cdot \frac{0}{7} = \frac{0}{56} = \boxed{0}$$

P(red then yellow)

$$\frac{4}{8} \cdot \frac{1}{7} = \frac{4 \div 4}{56 \div 4} = \boxed{\frac{1}{14}}$$

What is probability? Provide an example of how you use probability in every day life. (2 points)

**Probability is** the chance of an event happening.

- weather is a good example

What is required for this unit? Explain, in complete sentences, what skills we are working on. Give examples for the lessons this week to support your thoughts.

Scoring – 5 points

- 1 point – requirement(s) of this unit
- 1 point – skills from class
- 1 point – examples for support
- 1 point – use of algebraic terms
- 1 point – complete sentences

Remember:

- *Skills from the deli dilemma*
- *Terms to use: probability, thinking, logical reasoning, thought process*

-logical reasoning and common sense  
-explaining your thoughts  
-Deli Dilemma helped us  
use probabilities to solve  
a problem